Manitoba Monthly Communicable Disease Report
Reported up to December 31, 2008

Highlights:

1. **Antimicrobial Resistant Organisms**
   Together Methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* (*C. difficile*) accounted for 69% of all non-STI/HIV related communicable diseases reported to Manitoba Health and Healthy Living during December 2008.

2. **Sexually Transmitted Infections (STI) & Blood-Borne Pathogens (BBP)**
   There were 595 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in December 2008:
   - 495 reported cases of chlamydia (Ct) only
   - 53 reported cases of gonorrhoea (GC) only
   - 42 reported co-infections of Ct and GC and
   - 5 reported cases of syphilis

   Chlamydia has the highest incidence of reported STI. Females between the ages of 15 and 24 years comprised 45% of all reported chlamydia cases in the province.

   In December 2008, there was one case of Hepatitis B virus (HBV), 34 cases of Hepatitis C virus (HCV) and 3 cases of HIV newly reported in Manitoba.

3. **Other Communicable Diseases**
The number of reported cases in December 2008 was within the statistically expected range for these reported communicable diseases with the exception of the following diseases:

   - Methicillin-resistant *Staphylococcus aureus* (MRSA) – 222 isolates reported, less than 198 expected in an average month.

   The expected number of cases and range is statistically based on the average number of reported cases during November, December and January, 2003-2009.

Explanatory Notes

General:
Each monthly communicable disease report includes the number of cases of notifiable communicable diseases reported by lab or health provider during each individual month. Data for the monthly summary are aggregated based on the earliest of: symptom onset date, specimen collection date, or report date. For the majority of cases, the date used will be the specimen collection date. Some discrepancy of numbers may be based on reporting delays.

The observed numbers of cases are compared to the statistically expected range for each reportable communicable disease. This involves comparing the current month's case counts to the average case counts for the same month, one month subsequent and one month prior for the previous five years. These same months over the five years are used to determine the expected range of cases using the statistical calculation of standard deviation. Using this specific monthly pattern allows for adjustment within the statistics for both seasonality and cyclical disease patterns.

The year-to-date case counts are based on the calendar year.

The disease data reported in the monthly report has not been analyzed for severity or associated deaths at this time.

Disease specific information:

Methicillin-resistant *Staphylococcus aureus* (MRSA) positive results within Manitoba include both individuals who are symptomatic of infection and colonized individuals who have no symptoms and are mostly diagnosed during admission screening activities at facilities. If facilities increase their screening activities, it would usually result in a rise in colonized MRSA cases.

A new case of Hepatitis C Virus (HCV) infection is defined as a first positive test for an identifiable individual.

A new case of Human Immunodeficiency Virus (HIV) infection is defined as a positive test with a unique code that has not been previously linked to a positive test result in Manitoba. Positive HIV tests included in this month's statistics include both nominal and non-nominal testing results.

SUMMARY OF COMMUNICABLE DISEASE FOR December 2008

ICD9	DISEASE/INFECTION	MONTHLY TOTAL				YEAR-TO-DATE	
		2007	2008	Expected*	Ex. Range**	2007	2008
006.9	AMEBIASIS	7	3	3	0-6	44	34
022	ANTHRAX				***		
127.0	ASCARIASIS			0	0-2	1	
005.8	B. CEREUS			0	0-1	2	1
320.1	BAC. MENINGITIS - PNEUM		1	0	0-1	4	3
320.7	BAC.MENINGITIS-LISTERIA				***		
038.0	BETA STREP SEPTICEMIA	7	9		***	101	138
116.0	BLASTOMYCOSIS		1		***	17	18
005.1	BOTULISM				***		
023	BRUCELLOSIS			0	0-1	1	
005.2	C. PERFRINGENS	1		2	0-8	7	1
008.43	CAMPYLOBACTER	16	5	13	4-22	230	219
558.2	CLOSTRIDIUM DIFFICILE	70	77		***	986	890
046.1	CREUTZFELD-JACOB DISEASE				***	1	1
007.8	CRYPTOSPORIDIOSIS	2	2	1	0-4	71	73
061.0	DENGUE FEVER			0	0-0	1	1
065.4	DENGUE HEMORRHAGIC FEVER			0	0-0		
V02.4	DIPH.CARRIERS	1	1	0	0-1	2	6
032	DIPHTHERIA CASES			0	0-0	2	1
123.4	DIPHYLLOBOTHRIUM SPP		1	0	0-1	16	7
008.0	E. COLI-VEROTOXIGENIC	2	2	3	0-8	46	36
054.3	ENCEPHALITIS			0	0-1		
005.9	FOOD POISONING OTHER			0	0-1		
007.1	GIARDIA LAMBLIA	9	9	10	3-17	104	123
320.0	H.INFLUENZAE (CSF)			0	0-1		
041.5	H.INFLUENZAE (OTHER STERILE)			0	0-1	1	3
041.59	HAEM. INFLUENZAE (non-B)				***	9	16
480.8	HANTA VIRUS			0	0-0	1	
283.11	HEMOLYTIC UREMIC SYNDROME			0	0-0	1	
070.1	HEPATITIS A	1	1	1	0-4	8	12
070.3	HEPATITIS B		1	0	0-1	6	5
070.51	HEPATITIS C	23	34	33	21-45	347	349
487.1A	INFLUENZA A	1			***	71	78
487.1B	INFLUENZA B	1	1		***	2	45
482.83	LEGIONELLA			0	0-1	1	1
085.9	LEISHMANIASIS			0	0-0		
030.9	LEPROSY			0	0-0		
027.0	LISTERIA MONOCYTOGENES	1		0	0-1	2	5
088.81	LYME DISEASE	1		0	0-0	7	5
084	MALARIA	1	1	0	0-1	16	12
055.9	MEASLES			0	0-0		
036.0	MENINGOCOCCAL CSF		1	0	0-1	3	3
036.82	MENINGOCOCCAL ARTHROPATHY				***		
036.2	MENINGOCOCCEMIA BLOOD			0	0-1		2
B95.6	MRSA	169	222	92	0-197	2112	2501
072.9	MUMPS	1		0	0-1	8	2
036.89	N.MENINGITIDIS OTHER			0	0-0	1	
728.86	NECROTIZING FASCIITIS	5		1	0-3	20	17
729.1	NECROTIZING MYOSITIS				***		
323.9	OTHER ENCEPHALITIS			0	0-0	1	
033.1	PARAPERTUSSIS				***		
033.0	PERTUSSIS	1		6	0-14	18	16
038.2	PNEUM. SEPTICEMIA	12	5	7	3-11	101	111
073.9	PSITTACOSIS			0	0-0		

* Mean of 15 month totals, from previous, comparable and subsequent months for the past 5 years

** Mean +/- 2 standard deviations of mean

*** Data collected for less than 5 years.

		MONTHLY TOTAL				YEAR-TO-DATE	
ICD9	DISEASE/INFECTION	2007	2008	Expected*	Ex. Range**	2007	2008
083.0	Q FEVER			0	0-0		1
056.9	RUBELLA			0	0-0	2	
771.0	RUBELLA CONGENTIAL			0	0-0		
041.2	S.PNEUM.OTHER		1	1	0-3	4	4
003.0	SALMONELLA	13	11	13	0-27	210	235
120	SCHISTOSOMIASIS			0	0-1	1	
004	SHIGELLOSIS	1	1	1	0-3	15	29
050.9	SMALLPOX				***		
005.0	STAPH FOOD POISON			0	0-0		
785.5	STAPH TOXIC SHOCK				***	2	2
481.9	STREP PNEUMONIA - PR			0	0-1	1	1
041.1	STREP PYOGENES - OTHER STER	3	6		***	34	49
711.0	STREP.PNEUM.ARTHRITIS			0	0-0		
580.0	STREPT GLOMERULONEPHRITIS			0	0-0		
040.89	STREPT TOXIC SHOCK		1	0	0-1		1
481	STREPTOCOCCUS PNEUMONIAE			0	0-0	3	2
127.2	STRONGYLOIDES	7		0	0-1	24	6
037	TETANUS			0	0-0		
130.9	TOXOPLASMOSIS			0	0-2	2	
124	TRICHINOSIS			0	0-1		
086	TRYPANOSOMA CRUZI			0	0-0	2	
013	TUBERCULOSIS - NON-RESP.	4	4	2	1-4	22	25
011	TUBERCULOSIS - RESP.	7	12	7	2-12	76	108
010	TUBERCULOSIS-PRIM.		3	2	1-3	5	9
021.9	TULAREMIA			0	0-1	1	1
002.0	TYPHOID			0	0-0		1
081.9	TYPHUS			0	0-0		
B96.8	VANCOMYCIN R. ENTEROCOCCI	6	14		***	50	94
005.4	VIBRIO PARAHAEMOLYTICUS				***		
070.59	VIRAL HEP. OTHER				***		
B95.7	VRSA			0	0-0		
062.1	W. EQUINE ENCEPHALITIS			0	0-0		
198	WNV NEUROLOGICAL SYNDROME				***	72	2
008.44	YERSINIA ENTEROCOLITICA		2	0	0-1	10	16
		373	**432**			**4908**	**5321**

* Mean of 15 month totals, from previous, comparable and subsequent months for the past 5 years

** Mean +/- 2 standard deviations of mean

*** Data collected for less than 5 years.

SUMMARY OF COMMUNICABLE DISEASE BY AGE AND GENDER FOR December 2008

		<1		1 - 4		5 - 9		10 - 14		15 - 19		20 - 24		25 - 29		30 - 39		40 - 49		50 - 59		60 - 69		70 - 79		80 +		Missing	Total
ICD9	Disease Name	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	age/gendr	
006.9	AMEBIASIS										1			1					1										3
320.1	BAC. MENINGITIS - PNEUM																								1				1
036.0	BAC.MGTS-NMGTS(MGCCL MGTS								1																				1
038.0	BETA STREP SEPTICEMIA											2							1			1	2		1		2		9
116.0	BLASTOMYCOSIS																				1								1
008.43	CAMPYLOBACTER		1			1								1			1			1									5
558.2	CLOSTRIDIUM DIFFICILE	1	2											1		1		2	4	8	5	7	8	6	10	14	8		77
007.8	CRYPTOSPORIDIOSIS													1		1													2
V02.4	DIPH. CARRIERS																					1							1
123.4	DIPHYLLOBOTHRIUM																						1						1
008.0	E. COLI 0157												1	1															2
007.1	GIARDIA LAMBLIA			1	1							1				2	3			1									9
070.1	HEPATITIS A										1																		1
070.3	HEPATITIS B															1													1
070.51	HEPATITIS C											1	1	2	2	2	6		8	1	9		2						34
487.1B	INFLUENZA B									1																			1
084	MALARIA																		1										1
B95.6	MRSA	4	3	10	5	6	5	2	6	8	2	11	9	11	8	7	11	17	8	10	13	8	8	5	14	16	15		222
038.2	PNEUM. SEPTICEMIA	1														1			1	1			1						5
003.0	SALMONELLA	1		1	1					1							1	1		2		2		1					11
004	SHIGELLOSIS						1																						1
041.1	STREP PYOGENES - OTHER ST											1					1		1	1						1	1		6
041.2	STREP.PNEUM.OTHER																	1											1
040.89	STREPTOCOCCAL TOXIC SHOCK																		1										1
013	TUBERCULOSIS - NONRESP																1	1	1	1									4
010	TUBERCULOSIS - PRIMARY			1	1	1																							3

		<1		1 - 4		5 - 9		10 - 14		15 - 19		20 - 24		25 - 29		30 - 39		40 - 49		50 - 59		60 - 69		70 - 79		80 +		Missing	Total
ICD9	Disease Name	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	age/gendr	
011	TUBERCULOSIS - RESP							1		1	1			1		2	3		1		2								12
B96.8	VANCOMYCIN RES. ENTER.															1	1		1		1	4	1		1	2	2		14
198	WNV Neurological Syndrome																						1				1		2
008.44	YERSINIA ENTEROCOLITICA						1																1						2
		7	6	13	8	8	7	3	7	11	5	16	11	19	10	18	28	22	29	26	31	23	25	12	27	33	29		434

SUMMARY OF COMMUNICABLE DISEASE BY REGION (RHA) FOR December 2008

ICD9	Disease/Infection	Winnipeg	Brandon	N.Eastman		S.Eastman		Interlake		Central		Assiniboine		Parkland		Norman		Burntwood		Churchill	OOP	Missing	TOTAL
*Case Referred to:**				*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*				
006.9	AMEBIASIS	2					1																3
320.1	BAC. MENINGITIS - PNEUM	1																					1
036.0	BAC.MGTS-NMGTS(MGCCL M GTS																		1				1
038.0	BETA STREP SEPTICEMIA	6	1															2					9
116.0	BLASTOMYCOSIS								1														1
008.43	CAMPYLOBACTER	2									1							1	1				5
558.2	CLOSTRIDIUM DIFFICILE	53	2		2		5		6		3		4		1		1						77
007.8	CRYPTOSPORIDIOSIS		1														1						2
V02.4	DIPH. CARRIERS	1																					1
123.4	DIPHYLLOBOTHRIUM	1																					1
008.0	E. COLI 0157	1					1																2
007.1	GIARDIA LAMBLIA	2	1				2						3	1									9
070.1	HEPATITIS A	1																					1
070.3	HEPATITIS B	1																					1
070.51	HEPATITIS C	21	1				1	1	2		2		2		2			1			1		34
487.1B	INFLUENZA B										1												1
084	MALARIA	1																					1
B95.6	MRSA	102	1	1	1		2		4		7		2		8	1	5	53	32		3		222
038.2	PNEUM. SEPTICEMIA	2					1											1	1				5
003.0	SALMONELLA	4		1	1									2	2	1							11
004	SHIGELLOSIS		1																				1
041.1	STREP PYOGENES - OTHER ST	3									2							1					6
041.2	STREP.PNEUM.OTHER	1																					1
040.89	STREPTOCOCCAL TOXIC SH OCK	1																					1
013	TUBERCULOSIS - NONRESP	4																					4
010	TUBERCULOSIS - PRIMARY																	1	2				3
011	TUBERCULOSIS - RESP	5																5	2				12
B96.8	VANCOMYCIN RES. ENTER.	6							4				1		1			2					14
198	WNV Neurological Syndrome								1				1										2

* F=Federal Jurisdiction (First Nations and Inuit Health) P=Provincial Jurisdiction

STD Infection Summary Report - December 2008

	MONTHLY TOTAL		YEAR-TO-DATE	
DISEASE/INFECTION	**2007**	**2008**	**2007**	**2008**
All Chlamydia Infections	497	537	5591	6974
All Gonorrhea Infections (including PRNG)	98	95	1484	1382
All Syphilis Infections	3	5	47	62
Gonorrhea & Chlamydia Co-infections	47	42	608	617
HIV	3	3	76	89

Total Number of STD Cases by Age and Gender - December 2008

	<1		1 - 4		5 - 9		10 - 14		15 - 19		20 - 24		25 - 29		30 - 39		40 - 49		50 - 59		60 - 69		70 - 79		80 +		Missing	Total
Disease Name	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	age/gendr	
Chlamydia Only Cases							4		118	33	108	54	54	35	45	24	8	10		1		1						495
Gonorrhea Only Cases									5	4	9	8	6	4	5	6		3	2	1								53
Syphilis Only Cases											1	1				1		2										5
GC and CT Cases							1		9	3	6	13		4	2	2	1		1									42
							5		132	40	124	76	60	43	52	33	9	15	3	2		1						595
HIV										1					1	1												3

Regional STD Distribution - December 2008

Disease/Infection	Winnipeg	Brandon	N.Eastman		S.Eastman		Interlake		Central		Assiniboine		Parkland		Norman		Burntwood		Churchill	OOP	Missing	TOTAL
*Case Referred to:**			*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*				
All Chlamydia Infections	264	36	6	11		11	6	15	1	27		31	6	17	4	18	52	28		3	1	537
All Gonorrhea Infections	33	2	3			1		4		2		8	1	3	2	8	23	3		2		95
All Syphilis Infections	5																					5
GC and CT Infections	18	2				1		3				2		2		2	12					42

* F=Federal Jurisdiction (includes First Nations and Inuit Health) P=Provincial Jurisdiction